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Please find below and/or attached an Office communication concerning this application or proceeding.

An

	Application No.	Applicant(s)				
	09/770,078	ASAI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Leland R. Jorgensen	2675				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1)⊠ Responsive to communication(s) filed on <u>05 J</u>	une 2003 .					
	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1 - 44 is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 - 44</u> is/are rejected.						
	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)	, 22 2.0.0. 33 120	with which the tr				
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) Patent Application (PTO-152)				
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# **DETAILED ACTION**

# Claim Objections

1. In view of the applicant's amendment filed 5 June 2003, the objection to claim 35 is withdrawn.

# Claim Rejections - 35 USC § 102

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 1 3, 9, 11, 13 15, 19, and 24 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Freeman et al., USPN 6,068,183 [hereafter Freeman I].

#### Claim 1

Freeman I teaches an electronic apparatus [chip card 10]. The card comprises a rewritable display panel having memory capability [display elements 14a – 14c]. Freeman I, col. 3, lines 1 – 5; and figures 1A and 1C. A reception device [contacts 20 or communications path 23] receives display information. Freeman I, col. 2, lines 62 – 67; col. 4, lines 17 – 21; and figures 1A and 3. A controller [integrated circuit 16], responsive to the reception device, controls the display. Freeman I, col. 3, lines 32 – 38; and figure 1. The display shows first display information 32a and second display information 32b. Freeman I, col. 4, lines 6 – 16; and figure 2. The second display information may be shown with no power supplied to the display panel. Freeman I, col. 3, lines 1 – 4; and col. 6, lines 12 – 17.

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Claim 1, as amended, also teaches an operational element operable by an operator. Freeman I teaches, "Alternatively, a card owner may manipulate card controls to replay stored audiovisual presentations, for example, to retrieve an electronic coupon, reread map directions, or reexamine a company's advertisement." Freeman, col. 4, lines 10 - 14. See also Freeman, col. 5, lines 48 – 51 and figure 7.

# Claim 2

Freeman I teaches that the second display information is advertisement information 32. Freeman I, col. 1, lines 39 - 49; col. 3, lines 63 - 65; and figure 2.

#### Claim 3

Freeman I teaches that the controller is configured to display the second display information at all times in at least an area of the display panel. Freeman, col. 3, lines 1-4; and col. 6, lines 12-17.

# Claim 9

Freeman I teaches an electronic apparatus [chip card 10]. A reception device [contacts 20 or communications path 23] receives display information. Freeman I, col. 2, lines 62-67; col. 4, lines 17-21; and figures 1A and 3. A first display portion [display element 14a] shows first display information associated with an operation of the apparatus. A second display portion [display element 14b] shows second display information. Freeman I, col. 3, lines 1-21; and figure 1A. The second display information may be shown with no power supplied to the display panel. Freeman I, col. 3, lines 1-4; col. 6, lines 12-17.

Claim 9, as amended, also teaches an operational element operable by an operator.

Freeman I teaches, "Alternatively, a card owner may manipulate card controls to replay stored

audiovisual presentations, for example, to retrieve an electronic coupon, reread map directions, or reexamine a company's advertisement." Freeman, col. 4, lines 10 - 14. See also Freeman, col. 5, lines 48 - 51 and figure 7.

# Claim 11

Freeman I teaches a controller [integrated circuit 16], responsive to the reception device, controls the display. Freeman I, col. 3, lines 32-38; and figure 1. The display shows first display information 32a and second display information 32b. Freeman I, col. 4, lines 6 - 16; and figure 2. The second display information may be shown with no power supplied to the display panel. Freeman I, col. 3, lines 1-4; col. 6, lines 12-17.

#### Claim 13

Freeman I teaches that the reception device is contacts to provide electrical connections. Freeman I, col. 2, lines 62 - 67; col. 4, lines 17 - 21; and figures 1A and 3.

# Claim 14

Freeman I teaches that the chip cards offers wireless communication. Freeman I, col. 2, lines 62-67; col. 4, lines 17-21; and figures 1A and 3.

# Claim 15

Freeman I teaches a control means for inhibiting simultaneous performing of communication via the reception circuit for radio communication and updating of at least one of the first display portion and the second display portion. Freeman I, col. 2, lines 62 - 67; col. 4, lines 17 - 21; and figures 1A and 3.

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# Claim 19

Freeman I teaches that the first display information is received from an external apparatus [chip card reader 34] through the reception device [communications path 23]. Freeman I, col. 4, lines 17-34; and figure 3.

#### Claim 24

Freeman I teaches an electronic apparatus [chip card 10]. The card comprises a display for displaying information having memory capability [display elements 14a - 14b]. Freeman I, col. 3, lines 1 - 5; and figure 1A. A controller [integrated circuit 16], responsive to the reception device, controls the display. Freeman I, col. 3, lines 32 - 38; and figure 1. The display shows first display information 32a and second display information 32b. Freeman I, col. 4, lines 6 - 16; and figure 2. The second display information may be shown with no power supplied to the display panel. Freeman I, col. 3, lines 1 - 4; col. 6, lines 12 - 17.

Claim 24, as amended, also teaches an operational element operable by an operator. Freeman I teaches, "Alternatively, a card owner may manipulate card controls to replay stored audiovisual presentations, for example, to retrieve an electronic coupon, reread map directions, or reexamine a company's advertisement." Freeman, col. 4, lines 10 - 14. See also Freeman, col. 5, lines 48 – 51 and figure 7.

# Claim 25

Freeman I teaches an electronic apparatus [chip card 10]. The card comprises a display for displaying information having memory capability [display elements 14a - 14b]. Freeman I, col. 3, lines 1 - 5; and figure 1A. A controller [integrated circuit 16], responsive to the reception device, controls the display. Freeman I, col. 3, lines 32 - 38; and figure 1. The

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display shows first display information 32a and second display information 32b. Freeman I, col. 4, lines 6 - 16; and figure 2. The second display information may be shown with no power supplied to the display panel. Freeman I, col. 3, lines 1-4; col. 6, lines 12-17.

Claim 25, as amended, also teaches an operational element operable by an operator. Freeman I teaches, "Alternatively, a card owner may manipulate card controls to replay stored audiovisual presentations, for example, to retrieve an electronic coupon, reread map directions, or reexamine a company's advertisement." Freeman, col. 4, lines 10 - 14. See also Freeman, col. 5, lines 48 – 51 and figure 7.

# Claim 26

Freeman I teaches that the controller is configured to display the second display information in at least a portion of the display panel when the apparatus is operated and when the apparatus is not operated. Freeman I, col. 3, lines 1-4; col. 6, lines 12-17.

# Claim Rejections - 35 USC § 103

4. Claims 4 - 6, 10, 12, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman I.

# Claim 4

Freeman I teaches that the controller is configured to display the display information at all times in at least an area of the display panel. Freeman I, col. 3, lines 1-4; and col. 6, lines 12-17. Claim 4 adds that the controller is configured to inhibit an operation by a user to turn off the display of the second display information.

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Freeman I does not specifically teach that the controller is configured to inhibit an operation by a user to turn off the display of the second display information.

It would have been obvious to one of ordinary skill in the art at the time of the invention to configure the controller to inhibit an operation by a user to turn off the display of the second display information with the electronic apparatus as taught by Freeman I. Freeman I suggests such combination by teaching,

Such a configuration permits an orchestrated chip card 10 display where one display element 14a displays a stored value (e.g., a seat number), while the other 14b displays other graphic information (e.g., a theater seat map or directions to the theater).

Freeman I, col. 3, lines 8 - 12. Freeman I adds,

A variety of applications can make effective use of the above described techniques. For example, a stadium chip card system can quickly download electronic tickets for single or multiple events to a chip card along with seat and stadium location information. The ticket information can appear on the chip card display. This can occur at purchase time over a network, reducing box-office lines. Admission into the stadium by chip card would present an opportunity to download stadium specific information to each chip card such as the location of facilities or coupons for concession refreshments (e.g., cotton candy for a circus or hot-dogs for a ball game). Of course, the stadium could generate revenue by downloading an outside business' information for a fee.

Freedman I, col. 5, lines 53 - 65. Such application would require that the controller be configured to inhibit the user from turning off the display.

#### Claim 5

Claim 5 adds that the controller is configured to update the second display information when power necessary for operating the apparatus can be supplied even if the second display information is up to date.

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Freeman I does not specifically teach that the controller is configured to update the second display information when power necessary for operating the apparatus can be supplied even if the second display information is up to date.

It would have been obvious to one of ordinary skill in the art at the time of the invention to configure the controller to update the second display information when power necessary for operating the apparatus can be supplied even if the second display information is up to date so that the image could be refreshed whenever power is supplied. In the absence of such refreshing, the quality of the displayed image would deteriorate. Freeman I invites such configuration by teaching,

The microprocessor may control a driver circuit that develops the voltages appropriate to activate and deactivate the display element pixels. A power source on the card or an external power source (e.g., a card reader) can provide the power needed by the microprocessor and other stages. A polarity switch at the output of the driver circuit selects whether the row or column electrode is to receive the positive polarity. A row/column selector switch determines which specific row/column pair receives the voltages produced by the polarity switch and driver circuit. The microprocessor controls the driver circuit, polarity switch, and row/column selector switch.

Freeman I, col. 6, lines 47 - 58.

#### Claims 6 and 16

Claims 6 and 16 each add memory for storing the second display information, the memory being detachable from the apparatus, and wherein the reception device receives the second display information from the memory.

Freeman I does not specifically teach a memory being detachable from the apparatus.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add a memory being detachable from the apparatus to the apparatus as taught by Freeman I to

reduce the memory and bulk of the card when the card is not engaged in the card reader. Freeman I notes that the memory can be both in the card and the card reader. Freeman I thus invites such detachable memory by teaching, "Both a chip card with a display and a portable chip card reader can access and present the audiovisual information 32." Freeman I, col. 3, lines 61-63. Freeman I further adds.

The chip card reader 34 may be a stand-alone chip card reader, a computer peripheral, or a portable chip card reader. The chip card reader 34 may include software 38 and a database of audiovisual information 36. The chip card reader 34 not only sends information to the chip card 10, but may also store data describing the chip card transaction including which information the chip card reader 34 downloaded to the chip card 10.

Freeman I, col. 4, lines 22 - 29.

# Claims 10 and 12

Claim 10 each add that each of the first and second display portions is a part of a common display panel having memory capability. Freeman I teaches a first 14a and second 14b display portion. Freeman I, col. 3, lines 1 – 21; and figure 1.

Freeman I does not specifically teach that each of the first and second display portions is a part of a common display panel having memory capability.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the first and second display portions as part of a common display panel to allow a single large display panel on the electronic apparatus. Freeman I invites such combination by teaching,

Display elements 14a-14b are provided on the top surface of the card. The display elements 14a-14b preferably include multi-color ferroelectric LCD displays that offer flexibility and do not require a power source to display an image. However, other cards may offer other types of display elements (e.g., suspended particle displays or field emission displays). The chip card 10 shown

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includes two display elements 14a-14b. Such a configuration permits an orchestrated chip card 10 display where one display element 14a displays a stored value (e.g., a seat number), while the other 14b displays other graphic information (e.g., a theater seat map or directions to the theater). A chip card 10 may instead offer a single display element (not shown) that nearly covers an entire side of the chip card 10.

Freeman I, col. 3, lines 1 - 14. See also Freeman I, col. 3, lines 39 - 44; and figure 1C.

5. Claims 7, 8, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman I in view of Valencia et al., USPN 5,380,991.

# Claims 7 and 17

Claims 7 and 18 each add a detector for detecting information indicative of the presence or absence of reception of at least one of an electronic apparatus purchase price discount service and an electronic apparatus usage charge discount service.

Freeman I does not specifically teach a detector for detecting information indicative of the presence or absence of reception of at least one of an electronic apparatus purchase price discount service and an electronic apparatus usage charge discount service.

Valencia teaches an electronic apparatus [smart card 2] that has a detector for detecting information indicative of the presence or absence of reception of at least one of an electronic apparatus purchase price discount service and an electronic apparatus usage charge discount service. Valencia, col. 3, lines 13 - 41; col. 4, lines 4 - 15, 37 - 51; col. 6, lines 40 - 44; col. 7, lines 13 - 17; col. 9, lines 30 - 53.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine detection of the services as taught by Valencia with the electronic apparatus as taught by Freeman I. Valencia invites such combination by teaching,

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Current food industry practice in the promotion of brand name products generally falls into two categories: new product introduction for creating a demand for a particular product; and existing product promotion for the purpose of retaining or expanding current market share of a particular product. The standard method of promotion used to effectuate these purposes is to provide coupon offerings as price discount inducements to initially try or repurchase a particular product. Currently, the results of these efforts are not cost-effective or easily managed.

Historically, a manufacturer or a retailer would produce a relatively large number of coupons, i.e. in the range of 20 to 50 million, and distribute these coupons to the public. Typically, these coupons would be printed in local or national publications, distributed to customers, mailed directly to potential customers or printed on the packaging of a product which is sold, all to induce the purchasing of this product by the consumer. Furthermore, once the coupon is redeemed by the customer at a retail center, such as a supermarket, the coupons are sent to a clearing house for redemption. If indeed 50 million coupons are printed, the approximate cost of producing and redeeming these coupons would be approximately \$250,000.

While many customers are inclined to utilize these coupons, due to the increasingly high costs of food and household items, the process of clipping and saving these coupons tends to be time-consuming and cumbersome. Furthermore, once these coupons are retained by the customer, the customer must remember to bring these coupons to the store for redemption. Often times, the customer will not bring his or her coupons when "running into the store" to make a quick purchase. Additionally, once the customer makes his or her purchases, the coupons associated with these purchases must be located among the coupons which the customer is not utilizing, the expiration dates of these coupons must be checked, and the coupons must then be given to the store clerk for scanning or otherwise entering the items into the store's computer. Once the store accumulates a number of coupons, they must then be sent to a redemption center, which in turn informs the various manufacturers of particular coupon usage.

It is not suggested that, due to the tedious nature of this process discount coupons be eliminated, particularly since, due to the high cost of various products, such as breakfast cereals, the manufacturers would expect that customers would utilize discount coupons to make these products more affordable. Rather, it is suggested that a different system should be developed in which discounts can be applied to various products in a more economical and efficacious process.

Valencia, col. 1, lines 11 - 63. Valencia teaches about its invention.

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The present invention overcomes the deficiencies of the prior art by employing a paperless coupon redemption system, thereby avoiding the problems of the prior art in which paper coupons must be distributed by a manufacturer, retained by a customer, brought to a consumer outlet, organized at a checkout station, inspected to determine whether the coupons are expired and then redeemed at a central clearing house.

Valencia, col. 2, lines 51 - 58. Valencia invites one to consider different type of cards by adding,

Although FIGS. 1 and 2 describe the construction of a typical IC or smart card, it is noted that the particular construction of this card is unimportant to the teachings of the present invention. What is important is the utilization of a card having an erasable, programmable memory as well as data processing capabilities, so that the information provided in the memory of the card can be compared to information contained in a computer system (and also in every card terminal) for updating the information contained in the card.

Valencia, col. 4, lines 27 – 36. Valencia further states,

Since it is of paramount importance to determine whether a particular customer has previously purchased an item included in the progressive couponing technique, the customer's purchases must be tracked utilizing the smart card. Programmed into the erasable memory of the smart card would be a particular identification number associated with the customer, as well as an indication that a particular item subject to the progressive couponing system has been purchased. The smart card would then be updated by indicating an initial or subsequent purchase of an item subject to the progressive couponing system, as well as by deducting this discounted amount and any amounts discounted utilizing the "shop the dots" system from the customer's receipt total and the total amount presently listed in the card's memory.

Valencia, col. 6, lines 6-21. Valencia concludes with the desirability for the information to be tracked on each individual smart card.

It is important to note that, while it is possible that a customer would purchase and completely utilize the discounts available in a single trip to a retail establishment, the system and method according to the present invention contemplates that the customer would retain his or her smart card and utilize it during several trips to one or more retail establishments. Indeed, the fact that the information relating to this customer identification number, and the products previously purchased by the customer, is maintained in the memory of the smart

card, allows the customer to employ the smart card at various establishments which are not even linked to one another by a national, or central computer system. The smart card can be recharged with values up to 10,000 times and at any participating store.

Valencia, col. 9, lines 15 - 29.

#### Claims 8 and 18

For the reasons stated above in the discussion about claim 7 and 17, it would have been obvious to one of ordinary skill in the art at the time of the invention to configure the controller to select the display mode based on a result of detection by the detection means.

# Claim 20

Freeman I teaches a method of placing an advertisement on an electronic apparatus [chip card 10] having a display panel [display panel 14a - 14c] having memory capability and a controller [integrated circuit 16] for controlling the display panel. Freeman I, col. 3, lines 1-5, 32-28; and figure 1A and 1C. The method includes the steps of determining whether at least one predetermined service condition has been received. Based on a result of the determining step, if at least one predetermined service condition has been received, the controller activates a display on the display panel. Freeman I, col. 1, lines 50-64; col. 4, lines 7-10 and 60-65. The advertisement is displayed when the electronic apparatus is not operated and is maintained on the display with no power supplied thereto. Freeman I, col. 3, lines 1-4; and col. 6, lines 12-17.

Claim 20 adds that the predetermined service condition is selected from the group including an electronic apparatus purchase price discount service, an electronic apparatus usage charge discount service, a predetermined payment contract, and a predetermined discount in purchasing the electronic apparatus.

Freeman I does not specifically teach that the predetermined service condition is selected from the group including an electronic apparatus purchase price discount service, an electronic apparatus usage charge discount service, a predetermined payment contract, and a predetermined discount in purchasing the electronic apparatus.

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Valencia teaches an electronic apparatus [smart card 2] that has a predetermined service condition is selected from the group including an electronic apparatus purchase price discount service, an electronic apparatus usage charge discount service, a predetermined payment contract, and a predetermined discount in purchasing the electronic apparatus. Valencia, col. 3. lines 13 - 41; col. 4, lines 4 - 15, 37 - 51; col. 6, lines 40 - 44; col. 7, lines 13 - 17; col. 9. lines 30 - 53.

For the reasons stated above in the discussion about claims 7 and 17, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the predetermined services as taught by Valencia with the electronic apparatus as taught by Freeman I.

6. Claims 21 - 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman I in view of Valencia et al. as applied to claims 7 and 17 above, and further in view of Shimamoto. JP 405046855 A.

# Claims 21 - 23

Freeman I teaches a system and method of placing an advertisement on an electronic apparatus [chip card 10] having a display panel [display panel 14a - 14c]. Freeman I, col. 3. lines 1-5, 32-28; and figure 1A and 1C. The system includes setting means for setting the

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electronic apparatus so that predetermined information is displayed on the display panel if a predetermined service condition has been received. Freeman I, col. 1, lines 50 - 64; col. 4, lines 7 - 10 and 60 - 65. The display panel maintains the display with no power supplied. Freeman I, col. 3, lines 1 - 4; and col. 6, lines 12 - 17.

Valencia teaches an electronic apparatus [smart card 2] and method that maintains an identification number of the electronic apparatus and information on the presence or absence of a discount service. It is inherent that such material would be organized into a table. Valencia also teaches a counter for counting a usage charge based on a use condition of the electronic apparatus, and subtraction means for reducing the usage charge based on the registered information. Valencia, col. 3, lines 13 – 41; col. 4, lines 4 – 15, 37 – 51; col. 6, lines 40 – 44; col. 7, lines 13 – 17; col. 9, lines 30 – 53. Valencia also teaches a means for charging a user based on the reduced usage charge. Valencia, col. 3, lines 13 – 41; col. 4, lines 4 – 15, 37 – 51; col. 6, lines 40 – 44; col. 7, lines 13 – 17; col. 9, lines 30 – 53.

For the reasons stated above in the discussion about claims 7 and 17, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the discount services as taught by Valencia with the electronic apparatus as taught by Freeman I.

Neither Freeman I or Valencia specifically use the term usage charge.

Shimamoto teaches a magnetic card for storing a usage charge for the use of an electronic apparatus.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the usage card of Shimamoto with the smart card system as taught by Freeman I and

Valencia because it would allow a usage card while keeping the convenience and ease of use of a smart card.

7. Claims 27 and 29 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman I in view of Bril et al., USPN 5,841,418.

#### Claim 27

Freeman I teaches a communication terminal [chip card 10] comprising a first display portion [display element 14a] and a second display portion [display element 14b]. The display portions have a memory capability. Freeman I, col. 3, lines 1 – 4; col. 6, lines 12 – 17. A controller [integrated circuit 16] selects either the first display portion or the second display portion as a display portion on which received image data is displayed. Freeman I, col. 3, lines 32 – 38; and figure 1. The chip card has control means [integrated circuit 16] for selecting either the first display means or the second display means as a display on which received image data is displayed. Freeman I, col. 4, lines 6 - 16; and figure 2.

Freeman I does not specifically teach selecting either the first display portion or the second display portion based on an identifier attached to received communication data.

Bril teaches data tagging, that is, selecting either a first display portion [CRT] or the second display portion [LCD] based on an identifier attached to received communication data [additional bit or "tag"]. Bril, col. 5, lines 28 – 55; col. 6, line 55 – col. 7, line 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the data tagging system as taught by Bril with the communication terminal as taught by Freeman I. Bril invites such combination by teaching, "it may be desirable to generate two video

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display signals from one video controller in order to simultaneously display two different video images on two separate video displays." Bril, col. 1, lines 26 – 29. Bril teaches the advantages of such dual displays,

However, when such multimedia display equipment is used with conventional portable computers, at best, only the same image can be displayed on both displays (internal or projected) at the same time. In many instances, it is desirable to project the presentation display on an external monitor while displaying other information (e.g., speaker's notes or the like) on an internal display. It may also be desirable to be able to switch images between the two displays, such that a speaker can preview an image before projecting the image to the viewing audience.

In addition, the need for two video displays containing different images may arise in other situations where computers are used, such as CAD systems, spreadsheets, word processors or the like. In particular, the use of the Windows<sup>TM</sup> environment may make it desirable to allow a user to open one window (or application) on a first video display (e.g., laptop flat panel display) and open another application on another display (e.g., external monitor). Thus, for example, a user may be able to display a scheduler (daily organizer) program on one display while operating a word processing program on another.

Moreover, it may be desirable to provide a portable or non-portable computer with the ability to operate more than one video display. One shortcoming of the Windows<sup>TM</sup> software and other Graphical User Interfaces (GUIs) is that the user may be required to view his windows through the tight aperture of the traditional 14 inch monitor. The use of dual displays may allow a user to more readily operate in a true multitasking environment with an increased usable display area.

Bril, col. 3, lines 20 - 49. Bril adds,

Thus, one object of the present invention is to control more than one video display with a single video controller.

A further object of the invention is to produce different images on different displays using a single video controller.

Yet a further object is to produce different images on different displays in a single video controller while providing an easy to use software model writing video information for the different images into a video memory.

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It is yet a further object of the present invention produce independent images having differing pixel resolutions and/or refresh rates on different video displays.

Bril, col. 5, lines 57 - 67. Although Bril teaches a first display as an CRT and a second display as an LCD, Bril invites one to consider other alternatives. Bril, col. 9, lines 38 - 43; and col. 13, lines 16 - 23.

#### Claim 29

Freeman I teaches that the second display portion is liquid crystal display device that does not require a power source to display an image. Freeman I, col. 3, lines 2-5; col. 6, lines 11-16. It is inherent that such an LCD device must be reflective to reflect ambient light rather than draw on power for a back or edge light source. See Freeman I, Other Publications on Cover Sheet.

#### Claim 30

Freeman I teaches a receiver [contacts 20 or communications path 23] for receiving communication data. Freeman I, col. 2, lines 62 - 67; col. 4, lines 17 - 21; and figures 1A and 3.

#### Claim 31

Freeman I teaches a control means [software 64 or do not download information button 76] for inhibiting simultaneous performing of communication via the receiver and updating of at least one of the first display portion and the second display portion. Freeman I, col. 5, lines 36 – 52; and figures 6A, 6B, and 7.

# Claim 32

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Freeman I teaches that the first or second display information may be shown with no power supplied to the display panel. Freeman I, col. 3, lines 1-4; col. 6, lines 12-17.

#### Claim 33

Freeman I teaches a communication system. The system comprises a first communication terminal [chip card reader 34] including means for providing communication data [communication path 23] with an identifier related to a content of image data included in the communication data and a second communication terminal [chip card 10]. Freeman I, col. 4, lines 17 – 34; and figure 3. The chip card comprises communication means [contacts 20] for receiving communication data from the chip card reader. Freeman I, col. 2, lines 62 - 67; col. 4, lines 17-21; and figures 1A and 3. The chip card includes a first display means [display elements 14a – 14b] and a second display means having memory capability display elements 14a -14b]. Freeman I, col. 3, lines 1-5; and figure 1A. The chip card has control means [integrated circuit 16] for selecting either the first display means or the second display means as a display on which received image data is displayed. Freeman I, col. 4, lines 6 - 16; and figure 2.

Freeman I does not specifically teach selecting either the first display portion or the second display portion based on an identifier attached to received communication data.

Bril teaches data tagging, that is, selecting either a first display portion [CRT] or the second display portion [LCD] based on an identifier attached to received communication data [additional bit or "tag"]. Bril, col. 5, lines 28 – 55; col. 6, line 55 – col. 7, line 9.

For the reasons stated in the response to claim 27 above, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the data tagging system as taught by Bril with the communication terminal as taught by Freeman I.

# Claim 34

Freeman I teaches a method of communicating data comprising the steps of communicating data including image data to be displayed and a display having a memory capability. Freeman I, col. 1, lines 40 - 49; and figures 4A - 4D, 5A and 5B.

Freeman I does not specifically teach communicating an identifier associated with the data to indicate that the image data is to be displayed on display.

Bril teaches data tagging, that is, communicating an identifier associated with the data to indicate that the image data is to be displayed on display. Bril, col. 5, lines 28 - 55; col. 6, line 55 - col. 7, line 9.

For the reasons stated in the response to claim 27 above, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the data tagging system as taught by Bril with the communication terminal as taught by Freeman I.

8. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman I in view of Bril et al. as applied to claim 27 above, and further in view of Davis et al., USSIR H1173.

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#### Claim 28

Freeman I teaches a reception notification sound generator [speaker 17.] The speaker can both store and retrieve sound information from the chip card memory. Freeman I, col. 3, lines 26 - 31, 39 - 44; and figure 1C.

Neither Freeman I nor Bril specifically teaches that the controller is configured so that when the second display is selected as the display on which received image data is displayed, the controller displays the image data on the second display while inhibiting generation of a reception notification sound.

Davis teaches a controller [decoding controller 20] that is configured so that the controller displays image data on display [visual alert output 52] while inhibiting generation of a reception notification sound [audible alert output 34]. Davis, col. 1, lines 9 - 13, 50 - 55; col. 4, lines 31 - 43; col. 6, lines 2 - 8; and figures 1 & 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the controller and method as taught by Davis with the communication terminal as taught by Freeman I and Bril. Davis invites such combination by teaching,

Recent market trends have resulted in the combining of several alerting devices in one pager which are then caused to operate concurrently. Such alerting devices include lamps, vibrators, automatic back-lighting for liquid crystal displays (LCD's), light emitting diodes (LED's), and alert tone generators with either escalating volume or traditional manual volume adjustment.

Obviously, each such alerting device consumes battery power. It follows that combining several alerting devices in one pager and operating the several devices concurrently can rapidly discharge the battery. In fact, it can be shown that the activation of two such alerting devices simultaneously will have a more deleterious impact on battery performance than if the multiple alerting devices were activated sequentially (i.e. only one alerting device on at a time) or in a complementary manner (i.e. one alerting device on while another is off and vice versa).

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Davis, col 1, lines 29 - 47.

9. Claims 35 - 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al., USPN 6,019,284 [hereafter Freeman II] in view of Davis et al.

# Claim 35 - 39

Freeman II teaches a portable communication terminal [chip card 10]. Freeman II, figure 1A. The chip card comprises a display device [display element 22] having memory capability. Freeman II, col. 4, lines 38 - 39, 53 - 58; and figure 1A. A driver [driver circuit 42] for driving the display device updates a display on at least a portion of the display device. Freeman II, col. 5, lines 34 - 45; and figure 6. A communication means [speaker/microphone 54] performs communication. A power source 38 supplies power to the communications means and the driver. Freeman II, col. 6, line 56 - col. 7, line 11; and figures 5B - 5C. A controller [integrated circuit 16 having a microprocessor] controls communication and the display device. Freeman II, col. 5, lines 28 - 30. The chip card controls the power source to conserve energy. Freeman II, col. 7, lines 12 - 35. Freeman II teaches,

The card may include a power source. The power source may be replaceable and/or rechargeable. The card may provide a mechanism to conserve power (e.g., a kickstart circuit). The power source may provide multi-media features. For example, the power source may drive a speaker, a microphone, or cause the display element to produce a series of images (e.g., a video clip) on the display element. The power supply may also power communication elements in a contactless card.

Freeman II, col. 3, lines 14 - 40.

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Freeman II, however, does not specifically teach that the controller inhibits simultaneous performing of communication and updating of at least a portion of the display device so as to limit a load on the power source.

Davis teaches a controller [decoding controller 20] that inhibits simultaneous performing of communication [audible alert output 34] and updating of at least a portion of the display device [visual alert output 52] so as to limit a load on a power source [battery]. Davis, col. 1, lines 9-13, 50-55; col. 4, lines 31-43; col. 6, lines 2-8; and figures 1 & 2.

For the reasons stated in the discussion about claim 28 above, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the controller and method as taught by Davis with the portable communication terminal as taught by Freeman II.

10. Claims 40 – 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Freeman II in view of Kim, USPN 6,557,107 B1.

# Claims 40 - 44

Freeman II teaches a portable communication terminal [chip card 10]. Freeman II, figure 1A. The chip card comprises a display device [display element 22] having memory capability. Freeman II, col. 4, lines 38 – 39, 53 – 58; and figure 1A. A driver [driver circuit 42] for driving the display device updates a display on at least a portion of the display device. Freeman II, col. 5, lines 34 – 45; and figure 6. A communication device [contacts 20] performs communication. Freeman II, col. 31 – 34; and figure 1A. A power source 38 supplies power to the communications device and the driver. Freeman II, col. 6, line 56 – col. 7, line 11; and figures 5A – 5C. A controller [integrated circuit 16] has a microprocessor and circuitry for powering

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and controlling the display. The portable communication terminal [chip card] provides several methods of controlling output from a power source 38 to conserve card energy. Freeman II, col. 3, lines 14-40; col. 5, lines 28-30; and col. 7, lines 12-35.

Freedman II, however, does not specifically teach that the controller adjusts, based on a change in an input and output level of communication, timing of performing communication and timing of driving of the display device so as to limit a load on the power source.

Kim teaches a controller [microcontroller 100] adjusts, based on a change in an input and output level of communication, timing of performing communication and timing of driving of the display device so as to limit a load on the power source. Kim, col. 2, lines 25 - 53; col. 3, lines 42 - 45; col. 4, lines 58 - 62; and col. 10, lines 10 - 14.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the controller as taught by Kim with the controller as taught by Freeman II to conserve power. Kim invite such combination by teaching,

In the field of microcontrollers, power saving modes, such as, "Stop" and "Idle" modes have been implemented to reduce power consumption of the microcontrollers during dormant periods. Such power saving modes are very useful in battery-powered small instruments incorporating microcontrollers, for example, remote control transmitters and smart cards.

Kim, col. 1, lines 17 - 23.

# Response to Arguments

11. Applicant's arguments filed 5 June 2003 have been fully considered but they are not persuasive.

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Examiner rejected claims 1-6, 9-16, 19, and 24-26 as anticipated by or as unpatentable over Freeman I. In response, applicant amended independent claims 1, 9, 24, and 25 to add an operational element operable by an operator. Freeman I, however, teaches, "Alternatively, a card owner may manipulate card controls to replay stored audiovisual presentations, for example, to retrieve an electronic coupon, reread map directions, or reexamine a company's advertisement." Freeman, col. 4, lines 10-14. Thus, examiner maintains the rejection.

Examiner rejected claims 7, 8, 17, 18, and 20 - 23 as being unpatentable over Freeman I in view of Valencia et al. As to claim 20, applicant argued that neither Freeman nor Valencia teach that the predetermined service condition is selected from the group including an electronic apparatus purchase price discount service, an electronic apparatus usage charge discount service, a predetermined payment contract, and a predetermined discount in purchasing the electronic apparatus. Valencia does teach a predetermined service condition. Valencia teaches,

An integrated circuit card having a processor and an erasable, programmable memory, generally known as a "smart" card, would be issued to each customer, which would include the customer's identification number, and other personal information, as well as an amount of potential discounts, such as \$250 in its memory (hereinafter referred to as a smart card).... If one or more of the items are subject to additional or progressive discounts, the system would scan the customer's smart card to determine whether this particular item has previously been purchased by the customer. If this is the case, an increased discount would be deducted from the customer receipt total, as well as deducted from the discount amount reflected in the customer's smart card.

Valencia, col. 3, lines 13 – 41. The "potential discount, such as \$250 in its memory," is a predetermined discount. As to claims 7, 8, 17, and 18, applicant argued that these claims were allowable as dependant on claims 1 or 9. Thus, examiner maintains the rejection.

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As to claims 21 – 23, applicant amended theses claims to include a usage charge. In response to applicant's arguments, the recitation "a usage charge for the use of an electronic apparatus" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). However, upon further consideration, a new ground(s) of rejection is made as being anticipated by Freeman I in view of Valencia and further in view of Shimamoto.

Applicant's arguments, see pp. 16, 17, filed 5 June 2003, with respect to the rejection(s) of claim(s) 27, 29 - 33 under 35 USC 102(e) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of as being anticipated by Freeman I in view of Bril.

Applicant's arguments, see pp. 20, filed 5 June 2003, with respect to the rejection(s) of claim(s) 28 under 35 USC 102(e) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of as being anticipated by Freeman I in view of Bril and further in view of Davis.

Applicant's arguments, see p. 21, filed 5 June 2003, with respect to the rejection(s)of claim(s) 35 - 39 under 35 USC 102(e) and 103(a) have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of as being anticipated by Freeman II in view of Davis.

Applicant's arguments, see pp. 18, 21, 22, filed 5 June 2003, with respect to the rejection(s) of claim(s) 40 - 43 under 35 USC 102(e) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of as being anticipated by Freeman II in view of Kim.

#### Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gauthier et al., USPN 6,297,789 B2, teaches a smart card having segregated memories for the display.

Herdeg et al., WO 94/28512, teaches a smart card for charging usage fees.

Nara, USPN 5,072,103; Ishii et al., USPN 5,541,985; Bertina et al., USPN 5,682,027; and Geronimi, USPN 5,682,031, each teach a smart card.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leland Jorgensen whose telephone number is 703-305-2650. The examiner can normally be reached on Monday through Friday, 7:00 a.m. through 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on 703-305-9720.

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# Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to: .

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, telephone number (703) 306-0377.

lrj

STEVEN SARAS
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TECHNOLOGY CENTER 2600